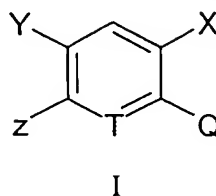


# WHAT WE CLAIMED IS

1. A compound represented by the formula (I) or its salt :



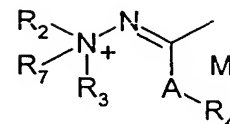
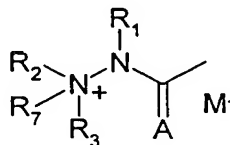
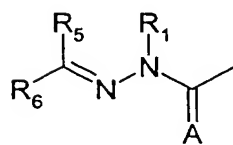
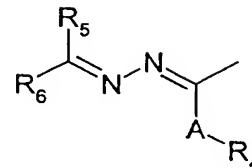
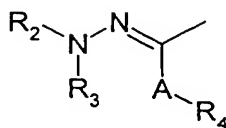
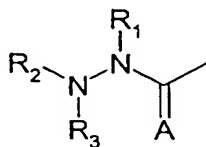
wherein

X is hydrogen or halogen;

Y is represented by hydrogen, halogen, nitro, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)haloalkyl or (C<sub>1-4</sub>)haloalkoxy;

T is represented by N or CH;

Z is one of the following groups;



A is oxygen, sulfur or NR<sub>4</sub>;

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are independent of each other and may be selected from the group consisting of hydrogen, cyano, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)alkoxyalkyl, (C<sub>2-6</sub>)alkynyl, (C<sub>2-6</sub>)alkenyl, aryl, heteroaryl, aryloxy, heteroaryloxy, (C<sub>3-6</sub>)cycloalkyl, (C<sub>3-6</sub>)cyclocarbonyl, carboxy, (C<sub>1-6</sub>)alkylcarbonyl, arylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylthiocarbonyl, (C<sub>1-</sub>

6)haloalkylthiocarbonyl, (C<sub>1-6</sub>)alkoxythiocarbonyl, (C<sub>1-6</sub>)haloalkoxythiocarbonyl, (C<sub>1-6</sub>)alkylamino, arylsulfonylamino, arylamino, (C<sub>1-6</sub>)alkylthio, arylthio, (C<sub>2-6</sub>)alkenylthio, (C<sub>2-6</sub>)alkynylthio, (C<sub>1-6</sub>)alkylsulfinyl, (C<sub>2-6</sub>)alkenylsulfinyl, (C<sub>2-6</sub>)alkynylsulfinyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>2-6</sub>)alkenylsulfonyl, (C<sub>2-6</sub>)alkynylsulfonyl, arylsulfonyl, where any of these groups may be optionally substituted with one or one more of the following group consisting of halogen, hydroxy, mercapto, cyano, nitro, amino, caboxy, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, haloaryl, alkoxyaryl, aryloxy, arylthio, haloaryloxy, heteroaryl, heteroaryloxy and (C<sub>3-7</sub>)cycloalkyl;

When R<sub>2</sub> and R<sub>3</sub> are taken together with the atoms to which they are attached, they represent a three to seven membered substituted or unsubstituted ring optionally containing oxygen, carbonyl, S(O)<sub>n</sub> or nitrogen with following optional substitutions, one to three halogen, cyano, nitro, hydroxy, amino, carbonyl, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, heteroaryl or (C<sub>3-7</sub>)cycloalkyl;

R<sub>5</sub> and R<sub>6</sub> are independent of each other and may be selected from the group consisting of hydrogen, (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>2-6</sub>)alkynyl, (C<sub>1-6</sub>)alkoxycarbonyl and heteroarylcarbonyl;

where any of these groups may be optionally substituted with one or more of the following groups consisting of halogen, hydroxy, cyano, nitro, amino, caboxyl, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, heteroaryl and (C<sub>3-7</sub>)cycloalkyl;

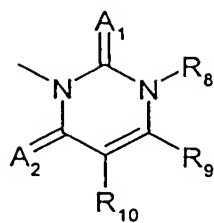
When R<sub>5</sub> and R<sub>6</sub> are taken together with the atoms to which they are attached, they represent a three to seven membered substituted or unsubstituted ring optionally containing oxygen, carbonyl, S(O)<sub>n</sub> or nitrogen with following optional substitutions, one to three halogen,

cyano, nitro, hydroxy, amino, carbonyl, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, heteroaryl or (C<sub>3-7</sub>)cycloalkyl;

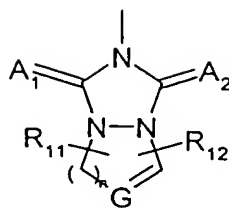
R<sub>7</sub> may be selected from the group consisting of hydrogen, (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl or (C<sub>2-6</sub>)alkynyl where any of these groups may be optionally substituted with one or more of the following groups consisting of halogen, hydroxy, cyano, nitro, amino, caboxyl, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, heteroaryl and (C<sub>3-7</sub>)cycloalkyl;

M is halogen, dichloriodate, tetrachloriodate, sulfate, nitrate, formate, acetate, propionate or butylate.

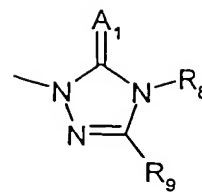
Q is selected from;



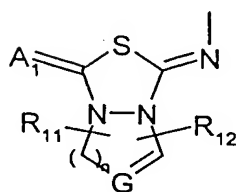
Q<sub>1</sub>



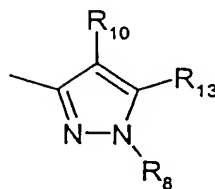
Q<sub>2</sub>



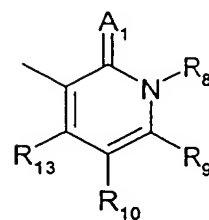
Q<sub>3</sub>



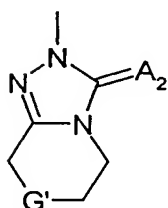
Q<sub>4</sub>



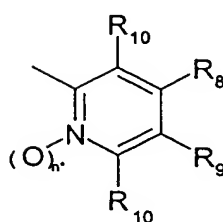
Q<sub>5</sub>



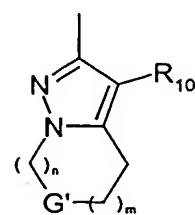
Q<sub>6</sub>



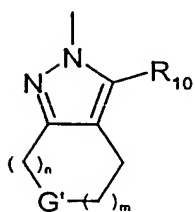
Q<sub>7</sub>



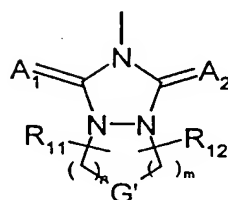
Q<sub>8</sub>



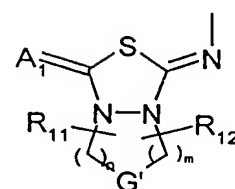
Q<sub>9</sub>



Q<sub>10</sub>



Q<sub>11</sub>



Q<sub>12</sub>

wherein

A<sub>1</sub> and A<sub>2</sub> are independently oxygen or sulfur;

R<sub>8</sub> is hydrogen, halogen, cyano, nitro, formyl, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)haloalkyl, amino, (C<sub>1-4</sub>)alkylamino, (C<sub>1-4</sub>)haloalkylamino, (C<sub>1-4</sub>)alkoxyamino, (C<sub>1-4</sub>)haloalkoxyamino, (C<sub>1-4</sub>)alkylcarbonyl, (C<sub>1-4</sub>)haloalkylcarbonyl, (C<sub>1-4</sub>)haloalkoxycarbonyl, (C<sub>1-4</sub>)alkylcabonylamino, (C<sub>1-4</sub>)haloalkylcarbonylamino, (C<sub>1-4</sub>)alkoxycarbonylamino, (C<sub>1-4</sub>)haloalkoxycarbonylamino,

(C<sub>1-6</sub>)alkoxyalkyl, (C<sub>1-6</sub>)haloalkoxyalkyl, (C<sub>1-6</sub>)alkylthio, (C<sub>1-6</sub>)haloalkylthio, (C<sub>2-6</sub>)alkenyl, (C<sub>2-6</sub>)haloalkenyl, (C<sub>2-6</sub>)alkynyl or (C<sub>2-6</sub>)haloalkynyl;

R<sub>9</sub> and R<sub>10</sub> are independent of each other and may be selected from the group consisting of hydrogen, halogen, cyano, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)haloalkyl, (C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)haloalkoxy, (C<sub>2-6</sub>)alkenyl, (C<sub>2-6</sub>)haloalkenyl.

R<sub>11</sub> and R<sub>12</sub> are independent of each other and may be selected from the group consisting of hydrogen, halogen, (C<sub>1-3</sub>)alkyl, (C<sub>1-3</sub>)haloalkyl, hydroxy, (C<sub>1-3</sub>)alkoxy, (C<sub>1-3</sub>)haloalkoxy, cyano, nitro, amino or (C<sub>1-6</sub>)alkylamino;

When R<sub>11</sub> and R<sub>12</sub> are taken together with the atoms to which they are attached, they represent a three to seven membered substituted or unsubstituted ring optionally containing oxygen, S(O)<sub>n</sub> or nitrogen with following optional substitutions, one to three halogen, cyano, nitro, hydroxy, amino, carbonyl, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, heteroaryl or (C<sub>3-7</sub>)cycloalkyl;

R<sub>13</sub> may be selected from the group consisting of hydrogen, halogen, cyano, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)haloalkoxy, (C<sub>1-4</sub>)alkylthio, (C<sub>1-4</sub>)haloalkylthio, (C<sub>1-4</sub>)alkylsulfinyl, (C<sub>1-4</sub>)haloalkylsulfinyl, (C<sub>1-4</sub>)alkylsulfonyl, (C<sub>1-4</sub>)haloalkylsulfonyl, (C<sub>2-6</sub>)alkenyl, (C<sub>2-6</sub>)haloalkenyl.

G is nitrogen or CR<sub>15</sub>;

G' is carbonyl, NR<sub>14</sub>, oxygen, S(O)<sub>n</sub> or CR<sub>15</sub>R<sub>16</sub>;

R<sub>14</sub> may be selected from the group consisting of hydrogen, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyl, arylcarbonyl and heteroarylcarbonyl;

where any of these groups may be optionally substituted with one or more of the following groups consisting of halogen, hydroxy, cyano, nitro, amino, carboxyl, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, heteroaryl and (C<sub>3-7</sub>)cycloalkyl;

R<sub>15</sub> and R<sub>16</sub> are independent of each other and may be selected from the group consisting of hydrogen, halogen, hydroxy, mercapto, amino, cyano, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)alkoxyalkyl, (C<sub>2-6</sub>)alkynyl, (C<sub>2-6</sub>)alkenyl, aryl, heteroaryl, aryloxy, heteroaryloxy, (C<sub>3-6</sub>)cycloalkyl, (C<sub>3-6</sub>)cyclocarbonyl, carboxy, (C<sub>1-6</sub>)alkylcarbonyl, arylcarbonyl, (C<sub>1-3</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylthiocarbonyl, (C<sub>1-6</sub>)haloalkylthiocarbonyl, (C<sub>1-6</sub>)alkoxythiocarbonyl, (C<sub>1-6</sub>)haloalkoxythiocarbonyl, (C<sub>1-6</sub>)alkylamino, arylsulfonylamino, arylamino, (C<sub>1-3</sub>)alkylthio, arylthio, (C<sub>2-6</sub>)alkenylthio, (C<sub>2-6</sub>)alkynylthio, (C<sub>1-6</sub>)alkylsulfinyl, (C<sub>2-6</sub>)alkenylsulfinyl, (C<sub>2-6</sub>)alkynylsulfinyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>2-6</sub>)alkenylsulfonyl, (C<sub>2-6</sub>)alkynylsulfonyl, arylsulfonyl, where any of these groups may be optionally substituted with one or one more of the following group consisting of halogen, hydroxy, mercapto, cyano, nitro, amino, carboxyl, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, heteroaryl and (C<sub>3-7</sub>)cycloalkyl;

n and m are independent of each other and represent an integer from 0 to 2; provided that m+n is 2, 3 or 4;

n\* is 0 or 1;

n\*\* is represent an integer from 0 to 2;

2. A compound or its salt according to the claim 1 wherein

X is hydrogen or halogen;

Y is represented by hydrogen, halogen, nitro, (C<sub>1-4</sub>)haloalkyl or (C<sub>1-4</sub>)haloalkoxy;

T is CH;

Z is selected from group (II), (III) or (V);

A is oxygen or sulfur;

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are independent of each other and may be selected from the group consisting of hydrogen, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)alkoxyalkyl, (C<sub>2-6</sub>)alkynyl, (C<sub>2-6</sub>)alkenyl, aryl, heteroaryl, aryloxy, heteroaryloxy, (C<sub>3-6</sub>)cycloalkyl, (C<sub>3-6</sub>)cyclocarbonyl, carboxy, (C<sub>1-6</sub>)alkylcarbonyl, arylcarbonyl, (C<sub>1-3</sub>), (C<sub>1-</sub>

6)alkoxycarbonyl, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylthiocarbonyl, (C<sub>1-6</sub>)alkoxythiocarbonyl, (C<sub>1-6</sub>)alkylamino, arylsulfonylamino, arylamino, (C<sub>1-6</sub>)alkylthio, arylthio, (C<sub>2-6</sub>)alkenylthio, (C<sub>1-6</sub>)alkylsulfinyl, (C<sub>2-6</sub>)alkenylsulfinyl, (C<sub>2-6</sub>)alkynylsulfinyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>2-6</sub>)alkenylsulfonyl, arylsulfonyl, where any of these groups may be optionally substituted with one or more of the following group consisting of halogen, hydroxy, mercapto, cyano, nitro, amino, carboxy, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, haloaryl, alkoxyaryl, aryloxy, arylthio, haloaryloxy, heteroaryl, heteroaryloxy and (C<sub>3-7</sub>)cycloalkyl;

R<sub>5</sub> and R<sub>6</sub> are independent of each other and may be selected from the group consisting of (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>2-6</sub>)alkynyl, (C<sub>1-6</sub>)alkoxycarbonyl and heteroarylcarbonyl; where any of these groups may be optionally substituted with one or more of the following groups consisting of halogen, hydroxy, cyano, nitro, amino, carboxyl, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, heteroaryl and (C<sub>3-7</sub>)cycloalkyl;

R<sub>7</sub> may be selected from the group consisting of hydrogen, (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl or (C<sub>2-6</sub>)alkynyl;

Q is selected from Q<sub>1</sub>, Q<sub>3</sub>, Q<sub>5</sub>, Q<sub>7</sub>, Q<sub>9</sub> or Q<sub>10</sub>;

wherein

A<sub>1</sub> and A<sub>2</sub> are independently oxygen or sulfur;

R<sub>8</sub> is hydrogen, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)haloalkyl, amino;

R<sub>9</sub> and R<sub>10</sub> are independent of each other and may be selected from the group consisting of hydrogen, halogen, cyano, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)haloalkyl, (C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)haloalkoxy, (C<sub>2-6</sub>)alkenyl, (C<sub>2-6</sub>)haloalkenyl.

R<sub>13</sub> may be selected from the group consisting of hydrogen, halogen, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)haloalkoxy, (C<sub>1-4</sub>)alkylthio, (C<sub>1-4</sub>)haloalkylthio, (C<sub>1-4</sub>)alkylsulfinyl, (C<sub>1-4</sub>)haloalkylsulfinyl, (C<sub>1-4</sub>)alkylsulfonyl or (C<sub>1-4</sub>)haloalkylsulfonyl ;

G' is carbonyl, NR<sub>14</sub>, oxygen, S(O)<sub>n\*\*</sub> or CR<sub>15</sub>R<sub>16</sub>;

R<sub>14</sub> is hydrogen or (C<sub>1-6</sub>)alkyl;

R<sub>15</sub> and R<sub>16</sub> are independent of each other and may be selected from the group consisting of hydrogen, halogen, hydroxy, amino, cyano, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)alkoxyalkyl, (C<sub>2-6</sub>)alkynyl, (C<sub>2-6</sub>)alkenyl, aryl, heteroaryl, aryloxy, heteroaryloxy, (C<sub>3-6</sub>)cycloalkyl, (C<sub>3-6</sub>)cyclocarbonyl, carboxy, (C<sub>1-6</sub>)alkylcarbonyl, arylcarbonyl, (C<sub>1-3</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylthiocarbonyl, (C<sub>1-6</sub>)haloalkylthiocarbonyl, (C<sub>1-6</sub>)alkoxythiocarbonyl, (C<sub>1-6</sub>)haloalkoxythiocarbonyl, (C<sub>1-6</sub>)alkylamino, arylsulfonylamino, arylamino, (C<sub>1-3</sub>)alkylthio, arylthio, (C<sub>2-6</sub>)alkenylthio, (C<sub>2-6</sub>)alkynylthio, (C<sub>1-6</sub>)alkylsulfinyl, (C<sub>2-6</sub>)alkenylsulfinyl, (C<sub>2-6</sub>)alkynylsulfinyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>2-6</sub>)alkenylsulfonyl, (C<sub>2-6</sub>)alkynylsulfonyl, arylsulfonyl, where any of these groups may be optionally substituted with one or one more of the following group consisting of halogen, hydroxy, mercapto, cyano, nitro, amino, carboxyl, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkylcarbonyl, (C<sub>1-6</sub>)alkylcarbonyloxy, (C<sub>1-6</sub>)haloalkylcarbonyl, (C<sub>1-6</sub>)haloalkylcarbonyloxy, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)alkoxycarbonyl, aminocarbonyl, (C<sub>1-6</sub>)alkylaminocarbonyl, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>1-6</sub>)haloalkylsulfonyl, aryl, heteroaryl and (C<sub>3-7</sub>)cycloalkyl;

n and m are independent of each other and represent an integer from 0 to 2; provided that m+n is 2, 3 or 4;

n\*\* is represent an integer from 0 to 2;

3. A compound or its salt according to the claim 2 wherein  
X and Y are independent of each other represent hydrogen or halogen;  
T is CH;  
Z is selected from group (II) or (V);  
A is oxygen;



R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are independent of each other and may be selected from the group consisting of hydrogen, (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)haloalkyl, (C<sub>1-6</sub>)alkoxy, (C<sub>1-6</sub>)haloalkoxy, (C<sub>1-6</sub>)alkoxyalkyl, (C<sub>2-6</sub>)alkynyl, (C<sub>2-6</sub>)alkenyl, aryl, heteroaryl, aryloxy, heteroaryloxy, (C<sub>3-6</sub>)cycloalkyl, (C<sub>3-6</sub>)cyclocarbonyl, carboxy, (C<sub>1-6</sub>)alkylcarbonyl, arylcarbonyl, (C<sub>1-3</sub>, (C<sub>1-6</sub>)alkoxycarbonyl, (C<sub>1-6</sub>)haloalkoxycarbonyl, (C<sub>1-6</sub>)alkylthiocarbonyl, (C<sub>1-6</sub>)alkoxythiocarbonyl, (C<sub>1-6</sub>)alkylamino, arylsulfonylamino, arylamino, (C<sub>1-6</sub>)alkylthio, arylthio, (C<sub>2-6</sub>)alkenylthio, (C<sub>1-6</sub>)alkylsulfinyl, (C<sub>2-6</sub>)alkenylsulfinyl, (C<sub>2-6</sub>)alkynylsulfinyl, (C<sub>1-6</sub>)alkylsulfonyl, (C<sub>2-6</sub>)alkenylsulfonyl, arylsulfonyl,

R<sub>5</sub> and R<sub>6</sub> are independent of each other and may be selected from the group consisting of (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl, (C<sub>2-6</sub>)alkynyl;

R<sub>7</sub> may be selected from the group consisting of hydrogen, (C<sub>1-6</sub>)alkyl, (C<sub>2-6</sub>)alkenyl or (C<sub>2-6</sub>)alkynyl;

Q is selected from Q<sub>1</sub>, Q<sub>3</sub> or Q<sub>5</sub>;

wherein

A<sub>1</sub> and A<sub>2</sub> are oxygen;

R<sub>8</sub> is (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)haloalkyl, amino;

R<sub>9</sub> and R<sub>10</sub> are independent of each other and may be selected from the group consisting of hydrogen, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)haloalkyl, (C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)haloalkoxy, (C<sub>2-6</sub>)alkenyl, (C<sub>2-6</sub>)haloalkenyl;

R<sub>13</sub> may be selected from the group consisting of hydrogen, halogen, cyano, (C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)haloalkoxy, hydroxy ;

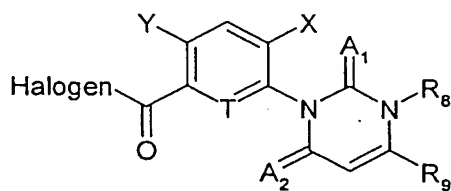
4. A herbicidal composition, characterized in that it contains at least one compound according to claim 1.
5. A herbicidal composition which comprises an effective amount of a compound or its salt of claim 1 and an agricultural adjuvant.
6. The herbicidal composition according to claim 5 wherein the compounds are formulated into a practical use form such as emulsifiable concentrate (EC), aqueous or oil based suspension concentrate (SC), wettable powder (WP), water dispersible granule (WDG) or

microencapsulated (ME) form.

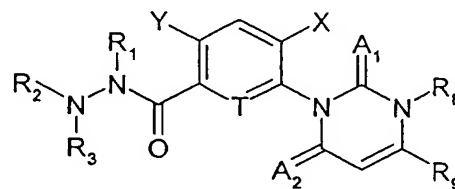
- 7 A method for controlling the growth of undesired plant species in plantation crops which comprises applying to the locus of the crop a herbicidally effective amount of a compound or its salt according to claim 1.
- 8 A method for controlling undesired vegetation in a crop field such as corn, peanut, cotton, wheat, sorghum, sunflower, soybean or rice by applying to the locus of the crop to be protect a herbicidally effective amount of a compound or its salt of claim 1.
9. A method for controlling weeds, which comprises applying to the locus to be protected a herbicidally effective amount of a compound or its salt of claim 1 in combination with one or more other herbicides for providing an additive or synergistic herbicidal effect.
10. A method for controlling weeds of claim 7 wherein the compound or its salt of claim 1 is applied to the soil as a pre-plant incorporated, pre-emergent or delayed pre-emergent herbicide.
11. A method for controlling weeds of claim 9 wherein the compound or its salt of claim 1 is applied to the soil as a pre-plant incorporated, pre-emergent or delayed pre-emergent herbicide.
12. A method for controlling weeds of claim 7 wherein the compound or its salt of claim 1 is applied as a post-emergent herbicide to plant foliage.
13. A method for controlling weeds of claim 9 wherein the compound or its salt of claim 1 is applied as a post-emergent herbicide to plant foliage.
14. A method for controlling weeds of claim 9 wherein the other herbicide is an acetanilide,

oxyacetamide, sulfonylurea, triazine, triketone, urea, amide, glyphosate or any referenced in the text.

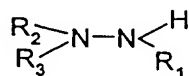
15. A method to defoliate potato and cotton using a compound or its salt of claim 1.
16. A process for the preparation of the compound or its salt represented by the formula (XI) in said claim 1, which comprises reacting a compound according to formula (IX) with a compound of the formula (X).



IX



XI

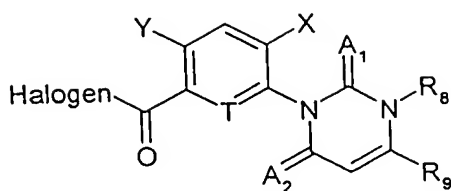


X

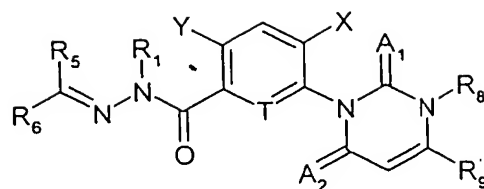
wherein

X, Y, A<sub>1</sub>, A<sub>2</sub>, T, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>8</sub> and R<sub>9</sub> are as previously.

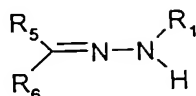
17. A process for the preparation of the compound or its salt represented by the formula (XVI) in said claim 1, which comprises reacting a compound of formula (IX) with a compound of the formula (X').



IX



XVI

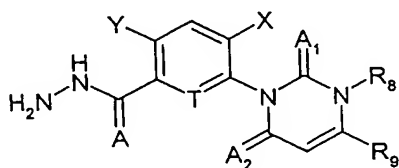


X'

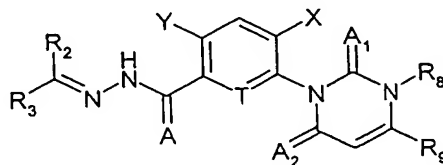
wherein

X, Y, A<sub>1</sub>, A<sub>2</sub>, T, R<sub>1</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>8</sub> and R<sub>9</sub> are as previously.

18. A process for the preparation of the compound or its salt represented by the formula (XVII) in said claim 1, which comprises reacting a compound according to formula (XXII) with aldehyde or ketone.



XXII

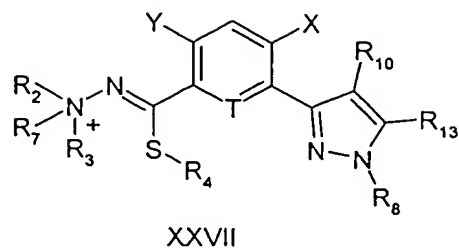
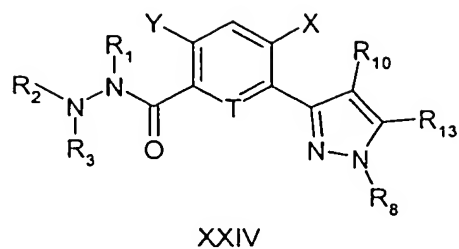


XVII

wherein

X, Y, A, A<sub>1</sub>, A<sub>2</sub>, T, R<sub>2</sub>, R<sub>3</sub>, R<sub>8</sub> and R<sub>9</sub> are previously defined.

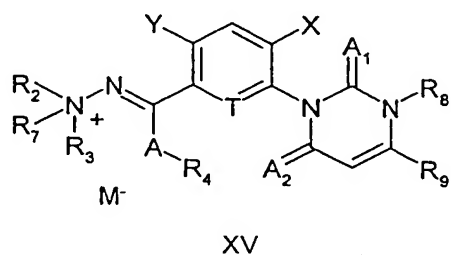
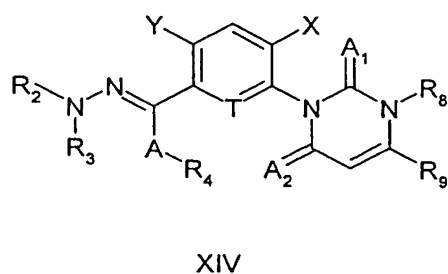
19. A process for the preparation of the compound or its salt represented by the formula (XXVII) in said claim 1, which comprises transformation of a compound according to formula (XXIV) by Lawesson's reagent and reacting it with R<sub>4</sub>-M and R<sub>7</sub>-M.



wherein

X, Y, T, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>10</sub> and R<sub>13</sub> are previously defined.

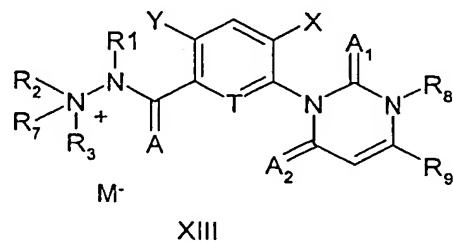
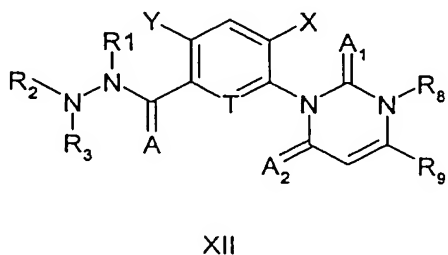
20. A process of the preparation of the compound or its salt represented by the formula (XV) in said claim 1, which comprises reacting a compound according to formula (XIV) with R<sub>7</sub>-M.



wherein

X, Y, A, A<sub>1</sub>, A<sub>2</sub>, T, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub> and M are previously defined.

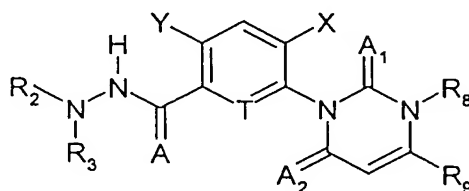
21. A process of the preparation of the compound or its salt represented by the formula (XIII) in said claim 1, which comprises reacting a compound according to formula (XII) with R<sub>7</sub>-M.



wherein

X, Y, A, A<sub>1</sub>, A<sub>2</sub>, T, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>7</sub>, R<sub>8</sub> and R<sub>9</sub> are previously defined.

22. A process of the preparation of the compound or its salt represented by the formula (XIV) and (XII) in said claim 1, which comprises reacting a compound according to formula (IV) with R<sub>4</sub>-M and R<sub>1</sub>-M respectively.

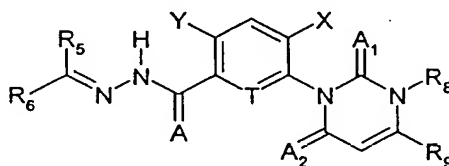


IV

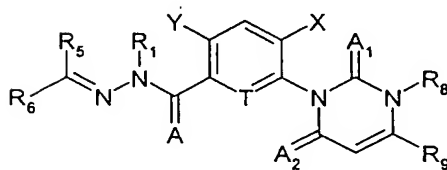
wherein

X, Y, A, A<sub>1</sub>, A<sub>2</sub>, T, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>8</sub> and R<sub>9</sub> are previously defined.

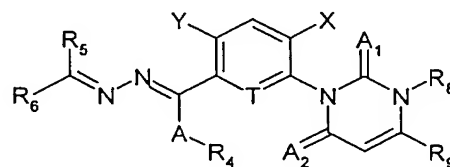
23. A process of the preparation of the compound or its salt represented by the formula (XVI) and (XVIII) in said claim 1, which comprises reacting a compound according to formula (XVII) with R<sub>1</sub>-M and R<sub>4</sub>-M respectively.



XVII



XVI

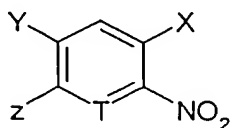


XVIII

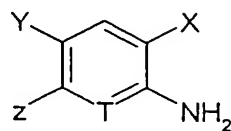
wherein

X, Y, A, A<sub>1</sub>, A<sub>2</sub>, T, R<sub>1</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>8</sub> and R<sub>9</sub> are previously defined.

24. A process of the preparation of the intermediate represented by the formula (XXX), which comprises reducing a compound according to formula (XXIX).



XXIX

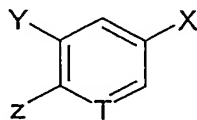


XXX

wherein

X, Y, T and Z are previously defined.

25. A process for the preparation of the intermediate represented by the formula (XXIX) in said claim 24, which comprises nitrating a compound according to formula (XXVIII)



XXVIII

wherein

X, Y, T and Z are previously defined.